



# ROMDAS

## Video Logging



# ROMDAS System Overview

ROMDAS® (ROad Measurement Data Acquisition System) has been developed by Data Collection Ltd. (DCL) as a comprehensive, cost effective and modular system for collecting asset and pavement information. Implemented in over 60 countries, it's flexible design allows for installation on locally sourced vehicles and meets widely accepted international standards.

Depending on your needs, a ROMDAS system can be easily customized with a variety of add-on modules to suit the specifications and budget of any project.

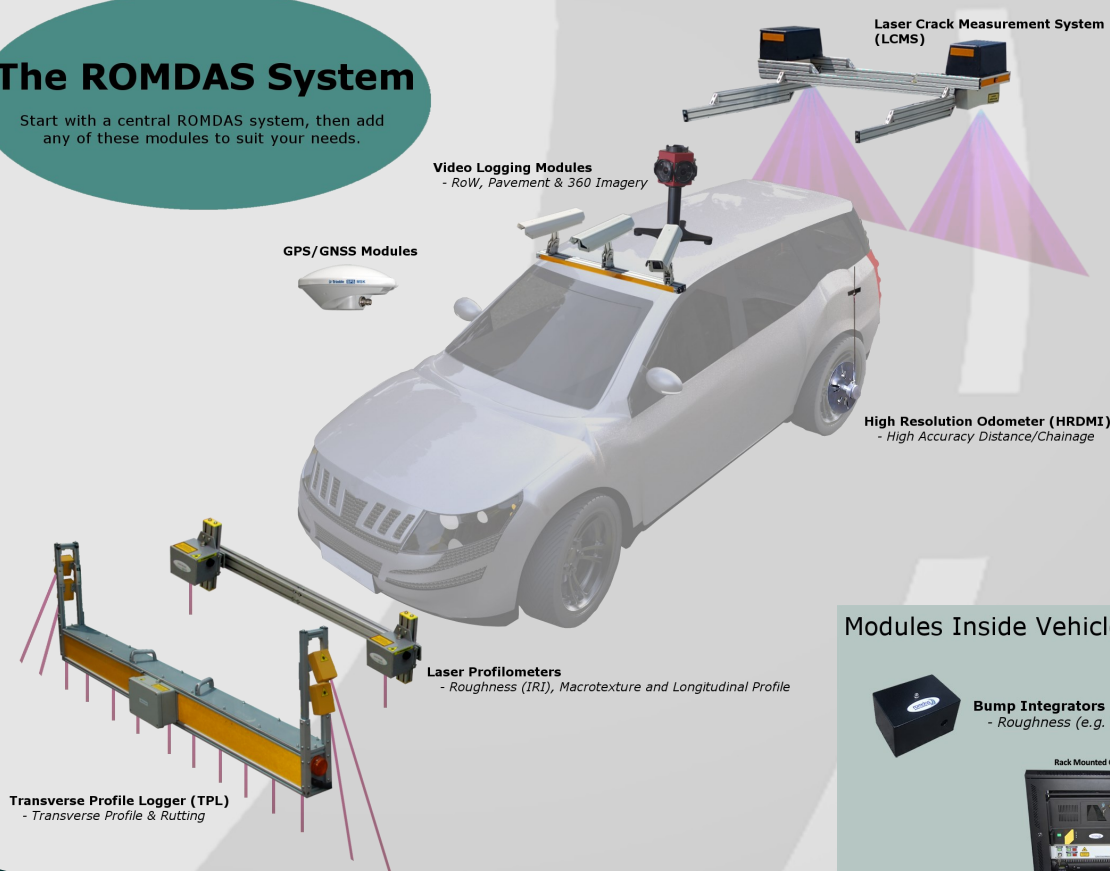
Whether a private consultant, government department or research institution, ROMDAS offers great reliability, flexibility and ease of use for anyone who needs to quickly and accurately collect asset data.

## ROMDAS CAN BE USED FOR...

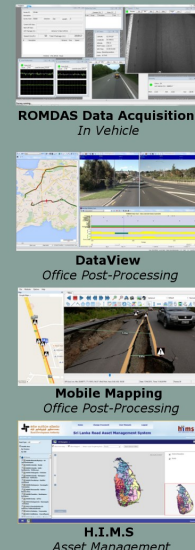
- ✓ High-speed network level or project specific road surveying
- ✓ Road roughness surveys
- ✓ Transverse profile/rutting surveys
- ✓ Macro-texture (MPD)
- ✓ Visual condition, environment or event rating
- ✓ Automatic crack and surface defect inspections
- ✓ Location referencing (spatial GPS/GNSS data or linear LRP data)
- ✓ GIS mapping of condition data and road alignment
- ✓ Video logging surveys (right of way, 360 and pavement view)
- ✓ Mobile mapping of roadside assets & inventory
- ✓ Road geometry surveying
- ✓ Travel time and congestion surveys
- ✓ iRAP road safety surveys

## The ROMDAS System

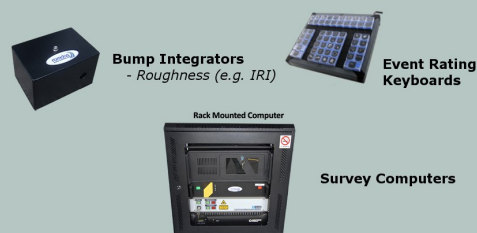
Start with a central ROMDAS system, then add any of these modules to suit your needs.



## Software Solutions



## Modules Inside Vehicle





## ROMDAS Module:

# Video Logging

## SPECIAL POINTS OF INTEREST:

- ROW, Pavement and 360 view cameras available
- Custom camera configurations
- Mobile mapping capabilities
- iRAP accredited
- Progressive/non-interlacing scanning cameras
- USB3 cameras
- User defined trigger distance
- Customizable image overlay
- Adjustable roof mounting, to capture your areas of interest
- IP67 rated enclosures
- Real-time display of images during surveys

ROMDAS offers Right Of Way (ROW), pavement and 360 view camera modules for its systems. The scalable design allows customers to select the number of cameras they require depending on the scope and focus of their project.

ROW cameras capture views focused on road asset and inventory, including signs, pavement markings, sidewalks and environmental assets. Pavement view cameras record high resolution images of the pavement to identify cracking, potholes and other visible defects. The addition of 360 degree cameras further enhance ROMDAS' ability to create a permanent record of the road corridor, and then extract useful data and insight from the comfort of the office.

Features like user-defined trigger distances, customisable image overlays that display detailed information about the survey, GPS referencing and generic .JPEG outputs ensure videos are practical, user-friendly and viewable in any standard media player.

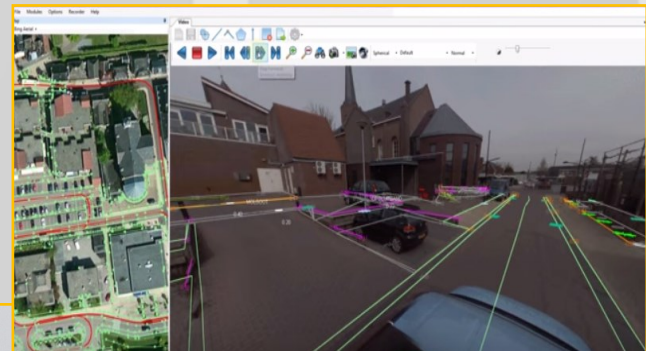
## POST-PROCESSING IMAGES (DATAVIEW)

For customers who want to record asset and visual condition data from their videos, ROMDAS DataView software offers features for synchronised viewing and rating of images. Users are able to create a list of events and record them at the push of a button. All recorded events are automatically referenced with the image's chainage and GPS coordinates.

## MOBILE MAPPING WITH ROMDAS

ROMDAS can now offer extensive mobile mapping capabilities from 360 videos. This includes the ability to record accurate measurements and locations within the road corridor. Powered by industry acclaimed image processing software from Horus, mobile mapping features allow users to reference and measure any visible asset and add it directly to GIS map layers. This system rivals the functionality of significantly more expensive mobile LIDAR systems, while at the same time only requiring a fraction of the processing time.

*Note: the ROMDAS LCMS module also records pavement images.*



## ROMDAS Module:

# Video Logging

### INSTALLATION AND OPERATIONAL PRINCIPLE

The cameras can be mounted on the roof of almost any vehicle. They are connected to the survey computer and controlled by the ROMDAS data collection software along with any other modules connected to the system. During a survey, the data collection software triggers the camera at the specified distance and shows a real-time image for the operator to preview. Videos are saved as generic .AVI files which are viewable in standard media players. And they are compatible with ROMDAS DataView software for synchronized viewing with all other survey data, image rating and mobile mapping.



ROMDAS is an accredited hardware and software supplier for iRAP safety inspections. ROMDAS has the added advantage of being able to collect iRAP and pavement condition data simultaneously. Existing ROMDAS customers can even retroactively perform iRAP coding on videos that have been already collected using a ROMDAS system, eliminating the cost of conducting dedicated iRAP surveys all together.

Pavement View



ROW



360 View

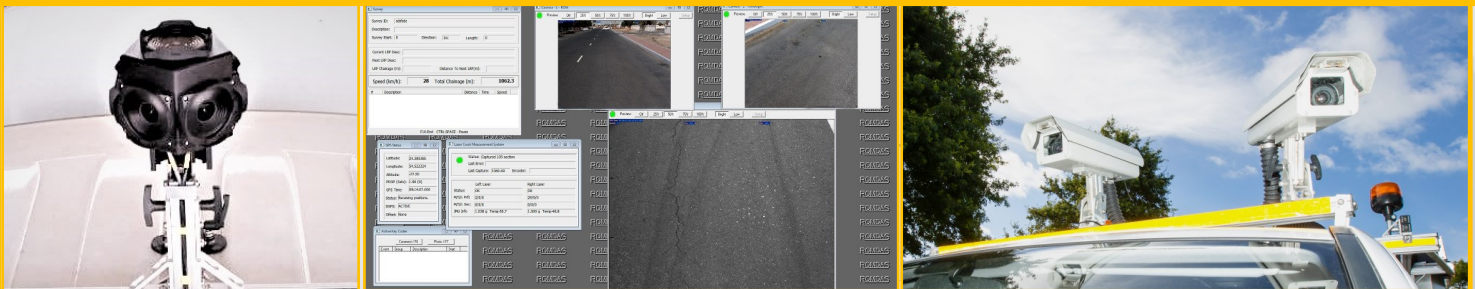


### COMPONENTS

The standard camera system includes:

- Camera and lens
- IP67 environmentally protected enclosure
- Power & communication cables
- Roof mounting

Pavement view module includes 1 x license of DataView. 360 camera module includes 3 x DataView with mobile mapping licenses.



## Specifications

Image Resolution	Standard ROW (7mp): configurable up to 3200 x 2200 Standard Pavement (7mp): configurable up to 3200 x 2200 360 camera: 12mp (6 x 2mp cameras), or 30mp (6 x 5mp cameras)
File Format	Generic .JPEG or .AVI format
Camera Connection	USB3
Number of Cameras	Up to 6 cameras